


**Concise Bio-data of Dr. Nirmal Kumar Sarkar**  
(Retired Professor, Department of Life Science, Presidency University, Kolkata  
Now, Honorary Professor, Midnapore City College, Midnapore, West Bengal)  
(Information updated on 31<sup>st</sup> July, 2021)



**SECTION-1 : PERSONAL INFORMATION**

- (1) **Name:** NIRMAL KUMAR SARKAR.
- (2) **Sex:** Male.
- (3) **Father's Name:** Late Ramesh Chandra Sarkar.
- (4) **Date of Birth:** 19/11/1956.
- (5) **Nationality:** Indian.
- (6) **Caste:** General.
- (7) **Address for Communication:** **Dr. Nirmal Kumar Sarkar**  
**C/o : Mr. B. Mukherjee, 2<sup>nd</sup> Floor, Flat No. 2B**  
**Udayan's Ushakiran Building,**  
**E-66 Ramgarh, Kolkata-700047.**
- (8) **Permanent Address:** 42, K. N. Mukherjee Road, P.O. Talpukur, Kolkata-700123, West Bengal, India.
- (9) **Contact (  ) No.:** +91-9874888431.
- (10) **E-mail:** [dr.nksarkar@yahoo.com](mailto:dr.nksarkar@yahoo.com)

**SECTION-2 : EDUCATIONAL QUALIFICATION**

- (1) **Higher Secondary:** **First Division** [1970-1973] (Ramkrishna Mission Boys' Home Higher Secondary Multipurpose School, Rahara) [West Bengal Board of Secondary Education].
- (2) **B.Sc (Honours in Zoology):** **First Class First** [1973-1976] (**Presidency College,** Kolkata) [University of Calcutta].

(3) **M.Sc (Zoology): First Class** [1976-1978] (University of Calcutta).

(4) **Ph.D (Science):** Thesis: ‘**Cytophysiological Studies of Some Murine Lymphoma and Leukemia**’ [1991] University of Calcutta].

(5) **Awards received during Student Life:**

(i) **National Scholarship** (Government of India).

(ii) **Calcutta University Jubilee P. G. (Merit) Prize** (Calcutta University).

## **SECTION-3 : TEACHING & RELATED ACTIVITIES**

(1) **Pre-retirement Designation:** **Professor in Department of Life Science, Presidency University, Kolkata.**

(2) **Post-retirement Involvement in Teaching:**

(i) Guest Faculty (2017), **Postgraduate Department of Zoology, Lady Brabourne College, Kolkata.**

(ii) Guest Faculty (2017 to now), **Postgraduate Study Centre of Vidyasagar University (Directorate of Distance Education)** at Kolkata-700029.

(3) **Present Designation:** **Honorary Professor (2018 to now), Postgraduate Department of Zoology, Midnapore City College, Midnapore.**

(4) **Colleges and University served before retirement:**

(i) **Darjeeling Government College: Postgraduate Department of Zoology** (17.07.1985 – 11.03.1991, then transferred to Presidency College).

(ii) **Presidency College: Postgraduate Department of Zoology** (14.03.1991 – 19.07.2012).

(iii) **Presidency University: Department of Life Science** (20.07.2012 – 30.11.2016).

(5) **Postgraduate-teaching Experience:** Sustained experience of **34(+)** years.

(6) **Areas of Teaching at Postgraduate level:**

(i) **Life Science** (Biophysics; Biochemistry; Tools and Techniques in Biological Studies).

(ii) **Zoology** (Animal Physiology; Haematology).

(iii) **Molecular Biology and Genetics** (Human Genetics; Biotechnology).

(7) **Honorary Postgraduate-teaching Activities in Other Institutions:** Occasionally extended honorary teaching activities to:

(i) **University of Calcutta** (Department of Zoology: Haematology Special Paper).

(ii) **University of Calcutta** (Department of Genetics: Developmental Genetics).

(iii) **Maulana Azad College** (Postgraduate Department of Zoology).

(8) **Past Recognition as Supervisor of Ph.D/M.Phil Course:** **Presidency University and Kalyani University.**

(9) **Membership in Postgraduate Board of Studies:** At different times, acted as Member of:

(i) Postgraduate Board of Studies in Zoology, **North Bengal University.**

(ii) Postgraduate Board of Studies in Zoology, **University of Calcutta.**

- (iii) Board of Research Studies in Science, **Kalyani University**.
- (iv) Postgraduate Board of Studies in Zoology, **Presidency College and Presidency University**.
- (v) Postgraduate Board of Studies in Molecular Biology and Genetics, **Presidency College and Presidency University**.
- (vi) Postgraduate Board of Studies in Biotechnology, **Presidency College and Presidency University**.
- (vii) Postgraduate Board of Studies in Zoology, **Midnapore City College**.

**(10) Paper Setter / Examiner / Moderator**: Acted as / Acting as **Paper Setter / Moderator / Examiner** in **Postgraduate and Undergraduate Examinations** of:

- (i) **University of Calcutta**.
- (ii) **North Bengal University**.
- (iii) **Kalyani University**.
- (iv) **Burdwan University**.
- (v) **Visva Bharati University**.
- (vi) **Vidyasagar University**.
- (vii) **Netaji Subhas Open University**.
- (viii) **Presidency University**.

**(ix) Postgraduate Colleges & others**: (a) Presidency College, (b) Maulana Azad College, (c) Vidyasagar College, (d) Bethune College, (e) Bidhannagar Government College, (f) Dinabandhu Andrews College, (g) Naihati Rishi Bankim Chandra College, (h) Barasat Government College, (i) Midnapore Raja Narendra Lal Khan Women's College, (j) Midnapore City College and (k) Public Service Commission, Government of West Bengal.

**(10) Head Examinership in Public Examination**: 5 years' experience as Head Examiner in **Madhyamik (Class X level) Examination**, West Bengal Board of Secondary Education.

**(11) Participation in Design and Development of Curricula**: Actively participated in:

- (i) Revision of Postgraduate Syllabus of Zoology, **University of Calcutta**.
- (ii) Preparation of B.Sc Zoology (Honours) Question Bank, **University of Calcutta**.
- (iii) Framing of Postgraduate and Undergraduate Syllabi of Zoology, **Presidency University**.
- (iv) Framing of Postgraduate Syllabus of Molecular Biology and Genetics, **Presidency University**.
- (v) Framing of B.Ed Syllabus, **West Bengal University of Teacher's Training, Education Planning and Administration**.

**(12) Extension of Academic Support to Students**: Acted as:

- (i) **Co-ordinator, Special Tutorship** (for NET), Presidency College/University.
- (ii) **Deputy Coordinator, DBT Star College Programme**, Presidency College/University.
- (iii) **Trainer in Workshops**, DBT Star College Programme, Presidency College/University.
- (iv) **Supervision of Dissertation** of several Postgraduate Students of Zoology/Molecular Biology and Genetics, Presidency College/University.

(v) **Counselor/Advisor** to Postgraduate Students/Researchers of other Institutions (University of Calcutta, Kalyani University, Maulana Azad College).

(vi) **Participation in a few educational excursions and field studies**, Presidency College/University, Vidyasagar University (DDE).

## **SECTION-4 : RESEARCH & RELATED ACTIVITIES**

(1) **Total Research Experience:** About 39 years; specialized in Haematological studies, Histological studies,, Cytochemical and Histochemical studies, Chromosomal analysis, Micronucleus test, Optical microscopy, Scanning electron microscopy, Biochemical assay of enzymes and different other substances of physiological importance.

(2) **Fields of Investigations carried out:** (a) Chromosomal studies in murine lymphoma and leukemia (before and after chemotherapy), (b) Micronucleus test in mammalian/fish models exposed to pesticides, heavy metals and carcinogens, (c) Haematological studies (at light and scanning electron microscopic levels and biochemical levels) in mammalian/fish models exposed to psychoactive drugs / heavy metals / toxic agents / parasitic infections, (d) Histamine releasing and allergic actions of psychoactive drugs, (e) Anti-spermatogenic action of psychoactive drugs / medicinal plant extracts / heavy metals, (f) Histopathological and biochemical changes in animal models treated with drugs and toxic chemicals and (g) Miscellaneous studies (Sporadic studies on Animal Behaviour; Reproductive physiology and Parasitology).

(3) **Research Papers Published: Around 85 Research Publications (20 in International Journals; around 65 in Indian Journals and Edited Volumes).**

Some selected publications are cited below (Full list of research publications may be furnished on demand):

(i) Inhibitory role of a smart nano-trifattyglyceride of *Moringa oleifera* root in epithelial ovarian cancer, through attenuation of FSHR-c-Myc axis. A. Ghosh, T. Roychowdhury, R. Nandi, R. Maiti, N. N. Ghosh, S. A. Molla, S. Mukhopadhyay, C. Prodhon, K. Chaudhury, P. Das, **N. K. Sarkar** et al. (2021) *Journal of Traditional and Complementary Medicine*, (Elsevier, Amsterdam, (30<sup>th</sup> March, 2021). <https://doi.org/10.1016/j.jtcme.2021.03.005>

(ii) Aerobic Degradation of Benzene by *Escherichia* spp. from Petroleum-contaminated Sites in Kolkata, West Bengal, India. S. Mukherjee, A. De, **N. K. Sarkar** and N. C. Saha. (2019). *Journal of Pure and Applied Microbiology*, 13(4), 2353-2362. <https://doi.org/10.22207/JPAM.13.4.51>

(iii) Isolation and characterization of Benzene utilizing *Bacillus* spp. from petroleum contaminated soil in Kolkata, West Bengal, India. S. Mukherjee, A. Dey, **N. K. Sarkar** and N. C. Saha. (2019). *Asian Journal Of Microbiology, Biotechnology And Environmental Science (E. M. International)*, 21(2): 428-437. ([www.envirobiotechjournals.com](http://www.envirobiotechjournals.com)).

(iv) Fenugreek, a potent hypoglycemic herb can cause central hypothyroidism via leptin – A threat to diabetes phytotherapy. J. Majumdar. P. Chakraborty, A. Mitra, **N. K. Sarkar** and S. Sarkar. (2017). *Experimental and Clinical Endocrinology & Diabetes (Thieme-Verlag, Germany)*, April 13, 2017. <https://doi.org/10.1055/s-0043-103458>

(v) Mugineic acid, active ingredient of wheat grass: an oral novel hexadentate iron chelator in iron overloaded diseases. P. Das, S. Mukhopadhyay, **N. K. Sarkar**, S. Mandal, M. Kar and

A. Mukhopadhyay. (2016). *Journal of Biochemistry* (Oxford University Press, London), (March 22, 2016): <http://jb.oxfordjournals.org/>

(vi) Acute toxicity test of a natural iron chelator and an antioxidant, extracted from *Triticum aestivum* Linn. (wheat grass). P. Das, S. Mukhopadhyaya, S. Mandal, A. Chakraborty, A. Pal, **N. K. Sarkar** and A. Mukhopadhyay. (2014). *Natural Product Research* (Taylor and Francis, London), April 04, 2014: <http://dx.doi.org/10.1080/14786419.2014.9013211>

(vii) Lead (Pb) induced anaemia in swiss mice – Light and scanning electron microscopic studies. R. R. Ray and **N. K. Sarkar**. (2013). *International Journal of Pharma and Bio Sciences* (Elsevier, Amsterdam), 4(1): 22 – 30.

(viii) Light and scanning electron microscopic studies on chromium-induced anemia in a murine model. R. R. Ray and **N. K. Sarkar**. (2012). *Bulletin of Environmental Contamination and Toxicology* (Springer-Verlag, Germany), 88(1): 10-14.

(ix) Light and scanning electron microscopic studies of echinocytosis in chronic arsenic intoxication. R. R. Ray and **N. K. Sarkar**. (2011). *Annals of Biological Research* (Scholars Research Library, UK), 2(4) : 238-243.  
<http://scholarsresearchlibrary.com/ABR-vol2-iss4/ABR-2011-2-4-238-243.pdf>

(x) Oviductal sperm storage structures and their changes during the seasonal (dissociated) reproductive cycle in the soft-shelled turtle *Lissemys punctata punctata*. S. Sarkar, **N. K. Sarkar** and B. R. Maiti. (2003). *The Journal of Experimental Zoology* (Wiley-Liss, Inc., USA), 295A: 83-91.

(xi) Haematological changes in buprenorphine-treated mice. D. Banerjee and **N. K. Sarkar**. (1997). *Folia Biologica* (Krakow, Poland), 45(3-4): 157-162.

(xii) Melatonin action on thyroid activity in the soft-shelled turtle, *Lissemys punctata punctata*. S. Sarkar, **N. K. Sarkar**, S. Bhattacharyya and P. Das. (1997). *Folia Biologica* (Krakow, Poland), 45(3-4): 109-112.

(xiii) *In vivo* and *in vitro* characterisation of the histamine releasing effect of buprenorphine. J. Ray, D. Banerjee and **N. K. Sarkar**. (1997). *Medical Science Research* (International Research Communication Service, England), 25: 717-718.

(xiv) A study of hepatobiliary functions in chronic heroin smokers. D. Banerjee and **N. K. Sarkar**. (1996). *Addiction Biology* (Wiley, England), 1(2): 197-200.

#### **(4) Research Projects Conducted/Supervised: Five in number :**

(i) **UGC Minor Project** [No. F-26-1 (2560)/86]: Studies of the Chromosomal and Mutagenic Effects of Some Tea-garden Pesticides.

(ii) **Ciba-Geigy Project** [No. 1994-HR/ras/29.05.1994]: Studies of the Physiological Effects of Some Drugs Producing Analgesia and Euphoria.

(iii) **CSIR Project** [No. 8/155[2]/96-EMR-I/12.03.1996]: Studies of Physiological Effects of Some Abused Psychoactive Drugs.

(v) **Labonya Prova Bose Trust Project** [No. LPBT-3/SS-1/96-97/11.06.1996]: Studies of the Effects of Some Non-Conventionally Abused Drugs on Mammalian Male Reproduction.

(v) **CSIR Project** [No. 8/155[5]/99-EMR-I/15.10.1999]: Assessment of Physiological Effects of Arsenic. [at Presidency College].

**(5) Supervision of Dissertations/Ph.D Thesis**: Supervised dissertation work of many Postgraduate students of Molecular Biology & Genetics; supervised PhD work of 3 scholars.



**(6) Current Research Interest:** At present, interested in study of (1) adverse physiological effects (haematotoxicity, hepatotoxicity, nephrotoxicity and anti-spermatogenic action) of the aromatic hydrocarbon (Benzene) in murine model, (2) microbial biodegradation of Benzene, and (3) efficacy of Wheat plant extract in eliminating iron overload in murine model, in collaboration with researchers of Presidency University and other institutes.

**(7) Editorial Activities in Journals/Proceedings/Others:** At different times, acted as:

(i) **Consulting Editor**, The Contemporary Who's Who, Raleigh, USA.

(ii) **Assistant Editor**, Indian Journal of Environment and Ecoplanning.

(iii) **Member, Editorial Advisory Board**, Journal of Natural History (India).

(iv) **Executive Editor**, Proceeding, DST (Government of India) and Higher Education Department (Government of West Bengal)-Sponsored National Symposium on Dimensions of Animal Science Researches and Human Need.

(v) **Executive Editor**, Proceedings, UGC-Sponsored National Symposium on Current Trends in Zoological Research.

(vi) **Executive Editor**, Golden Jubilee Commemorative Collection of Research Articles, Department of Zoology, Presidency College.

(vii) **Editor**, Proceedings, DST (Govt. of India) Sponsored Sir J. C. Bose Memorial National Symposium on Modern Trends in Animal Science Research and Challenges of the Day.

(viii) **Member, Editorial Board**, Study and Learning Materials in Zoology, Directorate of Distance Education, Vidyasagar University.

(ix) **Reviewer of Papers (Springer)**, Proceedings of The Zoological Society, Kolkata.

**(8) Organising Secretary of Scientific Symposia and Workshops:** Acted as **Organising Secretary** of:

(i) UGC-Sponsored National Symposium on Current Trends in Zoological Research, Presidency College (2007).

(ii) Higher Education Department (Govt. of West Bengal)-Sponsored Workshop on Basic Techniques in Molecular Biology, Presidency College (2008).

(iii) DST (Govt. of India) and Higher Education Department (Govt. of West Bengal)-Sponsored National Symposium on Dimensions of Animal Science Researches and Human Need, Presidency College (2009).

(iv) Higher Education Department (Govt. of West Bengal)-Sponsored Workshop on Advanced Techniques in Molecular Biology, Presidency College (2010).

(v) DST (Govt. of India) Sponsored Sir J. C. Bose Memorial National Symposium on Modern Trends in Animal Science Research and Challenges of the Day, Presidency University (2011).

**(9) Chairperson/Judge in Technical Sessions of Conferences:**

(i) Acted as **Chairperson/Judge of Technical Sessions** (Four times : latest in November, 2017) on Biological Science in **West Bengal State Science Congress**.

(ii) Acted as **Chairperson/Judge of Young Scientist Award Program** (February, 2018) in International Conferences on Mother Earth, Department of Environmental Science, Burdwan University.

(iii) Acted as **Chairperson/Judge of Poster Presentation** (April, 2019) in State-level Seminar on Urbanization, Changing Daily Life and Prevalence of Lifestyle Diseases in Egra S. S. B. College, East Midnapore.

(iv) Acted as **Chairperson/Judge of Technical Sessions** (thrice : latest in February, 2020, Conference on Bridges between Bioinformatics and Nutrigenomics) in 3rd Annual National Conferences in Midnapore City College.

**(10) Trainer's Activity in Workshops:** Acted as Trainer in more than one Workshop under 'DBT Star College Programme', Presidency College/University.

**(11) Participation in Seminars/Workshops:** Participated in several Seminars/Workshops for presentation of papers, delivering invited lectures or, as delegate.

**(12) Activity as Resource Person in Seminars/Conferences:**

(i) **National Service Scheme (NSS) Programs** (2012-2014), Presidency University.

(ii) **Regional Science and Technology Congress, Western Region** (November, 2017), Government of West Bengal, Burdwan University.

(iii) **International Conferences on Mother Earth** (February, 2018), Department of Environmental Science, Burdwan University.

(iv) **Seminar on Breast Cancer and Cervical Cancer** (May, 2018), Vivekananda Mahavidyalaya, Haripal, Hooghly.

(v) **Winter School in Environment Planning & Management** (December, 2018), UGC Human Resource Development Centre, Burdwan University.

(vi) **State-level Seminar on Urbanization, Changing Daily Life and Prevalence of Lifestyle Diseases** (April, 2019) in Egra S. S. B. College, East Midnapore.

(vii) **National Conferences on Nutrition Science** (February, 2019 and 2020) in Midnapore City College.

(viii) **International Seminar on Systematic Approach to Modern Sciences and Its Philosophical Impact** (February, 2020), Bajkul Milani Mahavidyalaya, East Midnapore.

**(13) HONOURS / RECOGNITIONS RECEIVED:**

(i) Presented with **Honorary Membership** by **New York Academy of Sciences** (1997-98).

(ii) Was honoured as **Fellow of Zoological Society (F.Z.S.)**, Kolkata.

(iii) Was honoured as **Fellow of Society of Environmental Sciences (F.S.E.Sc.)**, Dumka.

(iv) Was honoured as **Fellow of Institute of Landscape, Ecology & Ekistics (F.I.L.E.E.)**, Kolkata.

(v) Presented with **Indira Priyadarshini Gold Medal Award** (2017, Global Economic Progress and Research Association, New Delhi).

(vi) Presented with **Dr. A. P. J. Abdul Kalam Gold Medal Award** (2018, Global Economic Progress and Research Association, New Delhi).

(vii) Presented with **Personality of the Year 2018 Award** (2019, Reguerdon Inc., New Delhi).

(viii) Was honoured through inclusion of **Biographical Note** in **Asia Pacific Who's Who, Vol. XVII** (2019), Rifacimento International, New Delhi.

## **SECTION-5 : ADMINISTRATIVE, CO-CURRICULAR & OTHER ACTIVITIES**

### **1. ADMINISTRATIVE RESPONSIBILITIES CARRIED OUT:**

#### **(a) Participation in Institutional Governance:**

- (i) Acted as Officer-in-Charge (one year), Morning Section, Darjeeling Government College.
- (ii) Acted as Convener and Coordinator, Molecular Biology & Genetics, Presidency College/University (2005-2014).
- (iii) Deputy Coordinator, DBT Star College Programme, Presidency College/University (2011-2014).
- (iv) Acted as Academic Coordinator of Life Sciences, Presidency University (2012 - 2015).
- (v) On several short occasions, remained in charge of the Department of Zoology/Life Science, Presidency University.
- (vi) Acted as Member of Postgraduate and Undergraduate Faculty Councils in Science, Presidency University (2012-2016),
- (vii) Acted as Member of Doctoral Committee for Science, Presidency University (2012-2016),
- (viii) Acted as Professor-in-charge of Library Services, Presidency University (2014-2016),
- (ix) Acted as Member of Internal Quality Assurance Cell, Presidency University (2012-2016)
- (x) Acted as Member of Advisory Committee for Library, Presidency University (2014-2016)
- (xi) Acted as Member, Advisory Committee for National Service Scheme, Presidency University (2012-2016).
- (xii) Acted as Member, Committee for Abatement of Sexual Harassment, Presidency University (2014-2016).
- (xiii) Acted as Member, Advisory Committee, West Bengal University of Teacher's Training, Education Planning and Administration (2012-2016).

#### **(b) Committee-based Administrative Activities:** Acted as/Acting as:

- (i) Convener, Purchase Committee, Department of Zoology, Presidency College/University.
- (ii) Member, Postgraduate Admission Committee, Presidency College/University.
- (iii) Member, Documentation Committee for NAAC, Presidency College.
- (iv) Member, Institutional Animal Ethics Committee, Presidency College and University (2016 – continued till now as per Govt. Order).

### **2. CO-CURRICULAR ACTIVITIES:**

**(a) National Service Scheme (NSS) Activity:** Participated in NSS activity in Presidency University: Delivered popular lectures on Thalassaemia, Rabies, AIDS etc. to promote public awareness; participated in rallies.

**(b) Activity as Counsellor/Trainer:** (i) Acted as Co-ordinator, Special Tutorship (for NET), Presidency College. (ii) Occasionally acted as Trainer in Workshops under DBT Star College Programme, Presidency College/University. (iii) Occasionally acted as Counsellor/Advisor to



Postgraduate Students/Researchers of other Institutions (University of Calcutta, Kalyani University, Maulana Azad College).

**(c) Student-related Activities:**

(i) Acted as Organising Secretary, Golden Jubilee Celebration, Department of Zoology, Presidency College.

(ii) Acted as Organising Secretary, Silver Jubilee Celebration, Department of Zoology, Darjeeling Government College.

(iii) Acted as Presiding Officer in Students' Union Council Elections at Darjeeling Government College and Presidency College (in almost all elections).

**(d) Society-related Activities:** Occasionally participated Social welfare-related functions, Public Awareness Programs and Wildlife Awareness Rallies etc. organized by NSS (National Service Scheme) and NGOs. Also, acted as Presiding Officer in State Elections.

### **3. PROFESSIONAL RESPONSIBILITIES CARRIED OUT:**

**(a) Editorial Activities in Journals/Proceedings/Others: **Vide Point No. 7 of Section 4.****

**(b) Editorial Activities in Text Materials:**

(i) Acted as **Editor** of some Study Materials (Undergraduate level) published by Netaji Subhas Open University, Government of West Bengal.

(ii) Acted as **Editor** of some Study Materials (Postgraduate level) published by DDE, Vidyasagar University

(iii) Acted (two years) as **Reviewer** of Text Books of School Students (appointed by West Bengal Board of Secondary Education).

**(c) Organising Secretary of Symposia/Workshops: **Vide Point No. 8 of Section 4.****

**(d) Writing of Book/Book Chapter:**

(i) Wrote a Reference Book on Vaccines (in Bengali), published in 2012 by **West Bengal State Book Board, Government of West Bengal**

(ii) Wrote a book on Biochemistry for Study Materials (Undergraduate level) published by **Netaji Subhas Open University.**

(iii) Wrote different chapters on Physiology, Biochemistry and Haematology for Study Materials (Postgraduate level) published by **Vidyasagar University, Directorate of Distance Education.**

(iv) Chapter 13: A Study of Arsenic Effect on Blood and Tissue Glucose Concentrations in a Fish Model. (N. C. Saha, T. Midya and **N. K. Sarkar**). (2006). In: Fish Management and Aquatic Environment, edited by Prof. Arvind Kumar, Daya Publishing House, New Delhi,

(v) Chapter 6: Trypanosome Infection and Some Associated Physiological Changes in an Indian Catfish, *Clarias batrachus* Linnaeus.(J. Saha, N.C. Saha, T. K. Mukhopadhyay, T. Midya and **N. K. Sarkar**). (2007). In: Disaster: Ecology and Environment, edited by Prof. Arvind Kumar, Daya Publishing House, New

**(f) Delivery of Radio-talks on Science Topics:** Delivered many Radio-talks on popular Science Topics from All India Radio: (i) Calcutta Station and (ii) Kurseong Station.

**(g) Writing of Popular Science Articles:** Wrote many popular Science Articles in different periodicals and magazines (in Bengali as well as English).

**(h) Delivery of Online Lectures in Webinars:** Delivered some online lectures on popular Science Topics (mainly related to COVID-19 pandemic) in webinars organized by (i) Brainware University (Barasat), (ii) Bajkul Milani Mahavidyalaya (East Midnapore) and (iii) Egra S.S.B. College (East Midnapore).

### **DECLARATION**

**Information in this bio-data has been compiled as carefully as possible; any mistake that may be found has been made inadvertently.**

**Dated, Kolkata,  
The 31st July, 2021**



**(Dr. Nirmal Kumar Sarkar)  
Retired Professor, Department of Life Science, Presidency University, Kolkata**